

PROJECT DESCRIPTION

1. GENERAL
THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE TRAFFIC SIGNAL AT THE INTERSECTION OF MD 210 (INDIAN HEAD HIGHWAY) AT WILSON BRIDGE DRIVE IN PRINCE GEORGE'S COUNTY. MD 210 (INDIAN HEAD HIGHWAY) IS ASSUMED TO RUN IN A NORTH - SOUTH DIRECTION.

II. INTERSECTION OPERATION
THIS INTERSECTION OPERATES IN A NEMA FOUR-PHASE FULLY-TRAFFIC-ACTUATED MODE. THERE IS AN EXCLUSIVE-PERMISSIVE LEFT-TURN PHASE FOR NORTHBOUND MD 210. THE NORTHBOUND AND SOUTHBOUND MOVEMENTS OPERATE CONCURRENTLY.

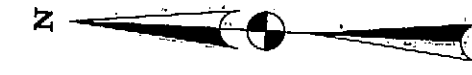
III. PEDESTRIAN OPERATION
NAVIGATOR AUDIBLE PEDESTRIAN PUSHBUTTONS TO CROSS THE SOUTH LEG OF THE INTERSECTION IS TO BE PROVIDED. WHEN THE PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED PERIOD OF TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE:

SOUTH: "WAIT TO CROSS INDIAN HEAD AT WILSON BRIDGE. WAIT."

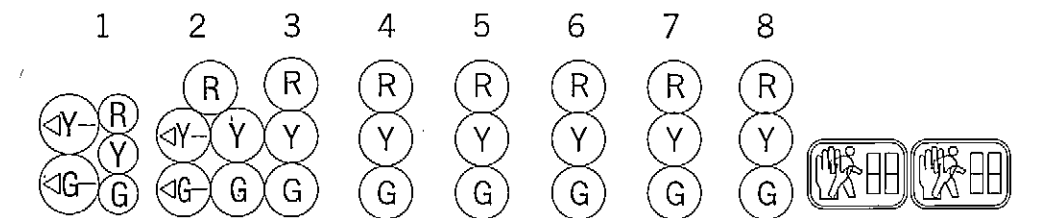
WHEN THE WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR	ITEM NO.	QUANTITY	UNIT	DESCRIPTION
	833060	30	LF	3 INCH DIAMETER POLYVINYL CHLORIDE CONDUIT, SCHEDULE 80, RISER
	860284	25	EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
	861105	270	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
	861107	350	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
	861108	930	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

C. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.



PHASE CHART



PHASE 1 AND 6	4GG	4GG	G	R	R	R	R	R	DW	DW
PHASE 1 CHANGE	4YG	4YG	G	R	R	R	R	R	DW	DW
PHASE 2 AND 5	G	G	G	G	G	R	R	R	DW	DW
2 AND 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	DW	DW
PHASE 4	R	R	R	R	R	G	G	G	DW	DW
PHASE 4 CHANGE	R	R	R	R	R	Y	Y	Y	DW	DW
PHASE 4 ALT.	R	R	R	R	R	G	G	G	WK	WK
PEDESTRIAN CLEARANCE	R	R	R	R	R	G	G	G	FDW	FDW
PHASE 4 ALT. CHANGE	R	R	R	R	R	Y	Y	Y	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	DARK	DARK

1. CONTACT PERSONS

THE CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

DISTRICT 3

MR. VENU NEMANI
ASSISTANT DISTRICT ENGINEER - TRAFFIC (PG)
301-513-7404

MR. VICTOR GRAFTON
UTILITY ENGINEER
301-513-7350

MR. TOM FOUNTAIN
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
301-513-7304

MR. DUANE BERNARD
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
301-513-7385

POTOMAC ELECTRIC POWER COMPANY
MR. RICHARD CHILCOAT
202-872-2000

OFFICE OF TRAFFIC AND SAFETY

MS. CORREN JOHNSON
CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ED RODENHIZER
MANAGER SIGNAL OPERATIONS
410-787-7650

MR. EUGENE BAILEY
MANAGER SIGN OPERATIONS
410-787-7670

MR. MIKE STOCKER
SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE)
410-787-7668

MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: MD 104.03-11, MD 104.04-13 THROUGH MD 104.04-16.

2. EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
900000	25	SF	SHEET ALUMINUM GROUND MOUNTED SIGNS CONSISTING OF: W11-2, (30"x30") - 2 EA, 14 SF W16-TOL, (24"x12") - 1 EA, 2 SF W16-TOR, (24"x12") - 1 EA, 2 SF R4-7, (24"x30") - 1 EA, 5 SF OM1-3, (18"x18") - 1 EA, 2 SF
900000	83	SF	SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGNS CONSISTING OF: R3-SL, (30"x36") - 2 EA, 15 SF D-3(1), (96"x16") - 3 EA, 32 SF M1-5(6), (30"x48"), 1 EA, 10 SF M1-5(6), (48"x72"), 1 EA, 24 SF R10-3(1), (9"x15"), 2EA, 2 SF
900000	1	EA	CONTROLLER CABINET, SIZE "S" W/CTRL, VIDEO INT. 1-8 CAM
900000	1	EA	4 CHANNEL DETECTOR AMPLIFIER
900000	1	EA	VIDEO DETECTION INTERFACE EQUIPMENT: 1-8 CAMERAS
900000	1	EA	UPS EQUIPMENT FOR "S" CABINET

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

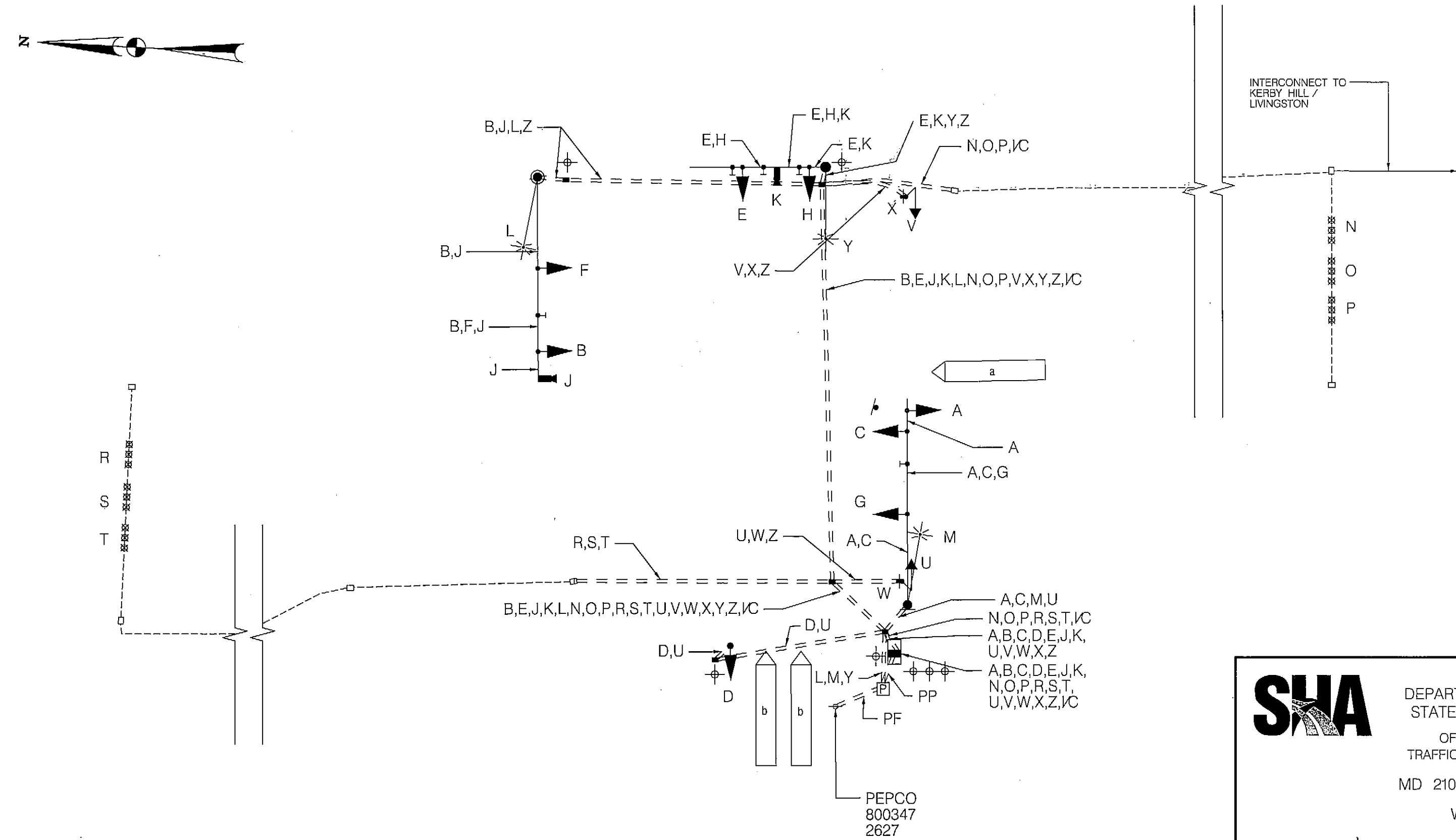
ITEM NO.	QUANTITY	UNIT	DESCRIPTION
100000	1	EA	MAINTENANCE OF TRAFFIC (PER INTERSECTION)
201032	10	CY	CLASS 2 EXCAVATION
203030	4	CY	TEST PIT EXCAVATION
390321	31	SY	CLASS I RIPRAP FOR SLOPE AND CHANNEL PROTECTION
390524	31	SY	GEOTEXTILE CLASS ST
504150	1	TON	HOT MIX ASPHALT SUPERPAVE 9.5MM FOR SURFACE, PG76-22, LEVEL-3
520109	10	SY	3 INCH GRADED AGGREGATE BASE COURSE
585621	130	LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585700	870	LF	REMOVAL OF EXISTING PAVEMENT MARKING LINES, ANY WIDTH
600000	98	LF	TYPE A COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH
600000	188	LF	TYPE A CURB ANY HEIGHT OR DEPTH
655105	674	SF	5 INCH CONCRETE SIDEWALK
655120	80	SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS
660782	25	LF	TRAFFIC BARRIER W BEAM MEDIAN BARRIER
661515	1	EA	TYPE D TRAFFIC BARRIER END TREATMENT
662325	50	LF	REMOVAL AND DISPOSAL OF EXISTING TRAFFIC BARRIER W BEAM
800000	3	EA	8 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
800000	1	EA	2-WIRE APS CENTRAL CONTROL UNIT
800000	3	EA	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH LED ROADWAY LUMINAIRE
800000	2	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
800000	2	EA	16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
800000	2	EA	IP-BASED VIDEO DETECTION CAMERA & ANY LENGTH LEAD-IN CABLE
800000	3	EA	5 FOOT OR 10 FOOT PEDESTAL POLE WITH BREAKAWAY COUPLINGS, FOUNDATION & GROUND ROD
800000	3	EA	MAST ARM POLE & 60' MAST ARM ANY 'T' DIMENSION, FOUNDATION & GROUND ROD
800000	1	EA	REMOVE & DISPOSE OF EXISTING SIGNAL EQUIPMENT (PER SIGNALIZED INTERSECTION LOCATION)
800000	1	EA	INSTALL CONTROLLER AND CABINET BASE MOUNT (ANY SIZE) INCLUDING F&I FOUNDATION & GROUND ROD
800000	90	LF	1 - CONDUCTOR ELECTRICAL CABLE, NO. 2/0 AWG, TYPE THHN
800000	500	LF	DISCONNECT, PULL-BACK & REDUTE CABLES
800000	290	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED OR SLOTTED
800000	330	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
800000	48	LF	WOOD SIGN SUPPORTS UP TO 4 INCH X 6 INCH
800000	108	SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
800000	1	EA	THIRD PARTY CONCRETE TESTING (PER INTERSECTION)
802501	360	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
810022	50	LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 8 AWG-THHN/THWN
811001	5	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE

WIRING LEGEND

A,B,C,D,E - 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
F,G,H,U,V - 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
W,X - 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
J,K - VIDEO DETECTION CONTROL CABLE
L,M,Y - ELECTRICAL CABLE - 3 CONDUCTOR (NO. 12 AWG) (B,W,G) TYPE TC
Z - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
PF - 3-1- CONDUCTOR ELECTRICAL CABLES, NO. 2/0 AWG, TYPE THHN
PP - ELECTRICAL CABLE, 3-1- CONDUCTOR NO. 8 AWG-THHN/THWN
I/C - EXISTING INTERCONNECT CABLE
N,O,P,R,S,T - EXISTING NON-INVASIVE MICROLOOP PROBE LEAD-IN CABLE

GROUND ROD

WIRING DIAGRAM



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 210 (INDIAN HEAD HIGHWAY) AT
WILSON BRIDGE DRIVE
OXON HILL, MARYLAND

GENERAL INFORMATION SHEET

SCALE N.T.S. ADVERTISED DATE 05/2013 CONTRACT NO. XY1515185

DESIGNED BY AFAMH COUNTY PRINCE GEORGE'S
DRAWN BY AF LOGMILE 16021012.02
CHECKED BY JFL TMS NO. L803
F.A.P. NO. TOD NO.

TS NO. 3112D-GI DRAWING **SG-3** OF 3 SHEET NO. 12 OF 12